

Fire Sprinkler Organization Responds to Inaccurate Information about High Rise Fire Safety Following Fires in Hancock Building

Orland Park, IL (February 23, 2018) – Recent fires in a Chicago high-rise building formerly known as the John Hancock Center, prove that fire detection alone is not safe. Two separate kitchen fires were reported on February 18; one was on the 52nd floor; the other was on the 69th floor. A 32-year-old personal trainer was severely injured. Two years ago, five people were injured when a candle caused a fire in a bedroom on the 50th floor of the same building.

The high-rise was built before 1975 when fire sprinklers were required. The commercial floors were retrofitted with fire sprinklers. The building's garage also is protected with fire sprinklers. The residential units, from the 44th to the 92nd floor, do not have fire sprinklers.

When talking to the media, a deputy district chief with the Chicago Fire Department discussed how serious and difficult it is for firefighters to get equipment, manpower, and tools up to the higher floors. After fire sprinklers prevented a car fire from spreading on the 7th floor of the garage on February 11, a spokesperson from the Chicago Fire Department said fire sprinklers kept the fire in check, and allowed firefighters time to stretch a hose line to extinguish the fire.

Unfortunately, in the same news story about the two kitchen fires, another fire department spokesperson incorrectly stated that the building's smoke detection system provides sufficient warning for residents to evacuate, long before the heat from the fire would activate sprinklers.

Residential fire sprinklers activate when heat from the fire reaches 165 degrees, often just seconds after the smoke alarm activates. Sprinklers limit fire spread and prevent flashover, allowing people to safely escape while firefighters have time to respond. According to the National Fire Protection Association (NFPA, 2017) fire death rate was 87 percent lower in properties with fire sprinklers.

Research conducted by Underwriters Laboratories (UL) and the National Institute of Standards and Technology (NIST) concluded that fires today burn faster and are deadlier compared to fires that occurred prior to 1975. Fires burn faster due to polyurethane foam-filled furniture and other synthetic objects found in residential units that cause billowing, poisonous smoke.

Passive “compartmentation” along with smoke alarms were part of the primary fire protection strategy in high-rise buildings prior to codes that required fire sprinklers. The buildings were constructed to confine the fire to the unit of origin. Unfortunately, if occupants are not able to escape the unit of origin, the result can be injury or death. It is inaccurate for a fire department spokesperson to suggest residents can safely escape before a sprinkler would activate.

Today's model codes provide more than 100 “tradeoffs” when buildings are protected with fire sprinklers. Tradeoffs are the reduction in the requirements for structural fire resistance when sprinkler protection is provided throughout the buildings. There are no tradeoffs for smoke alarms.

In December, a new federal tax incentive was passed to retrofit buildings with fire sprinklers. Building owners are encouraged to consult with their tax advisors for more information.

About the Northern Illinois Fire Sprinkler Advisory Board (NIFSAB)

NIFSAB is a nonprofit organization dedicated to promoting progressive legislation, raising public awareness, and educating code officials and governmental policy makers by demonstrating the proven performance of fire sprinklers in saving both lives and property. For more information, visit www.highriselivesafety.com.

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